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CATC UPT2 Configuration

Application Note

Revision 1.00

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1.1 Introduction

This applications note was written to answer questions that have arisen from the field about how and when to use the CATC UPT2 port tester.

For detailed operation information on the UPT2, please refer to the User Manual included with your UPT2 when purchased or available on the web at www.catc.com.

1.2 *Question #1: Is the UPT2 a USB compliance tester?*

No. UPT2 is a production tester. Even though UPT2 can be used as a development tool, it is not designed or manufactured for development purposes. Its intended use is as a production tool for PC manufacturers in a production environment only. Consequently, although a device under test (DUT) may successfully pass UPT2's tests, it may not pass the USB-IF's compliance tests.

1.3 *Question #2: When would I want to disable a test?*

There are several instances where you might need to disable a UPT2 test. For example, if a HUB does not provide over-current (OC) protection, you should not run an OC test. Another example would be if a device under test (DUT) is unable to pass a certain test due to design issues, you might want to disable the applicable UPT2 test in order to test other aspects of the DUT's design.

1.4 *Question #3: How do I enable or disable a test?*

UPT2 provides a built-in configuration screen which sets up tests. To see the Configuration screen, select **File** > **View/Edit Configuration** from the menu, as shown below.

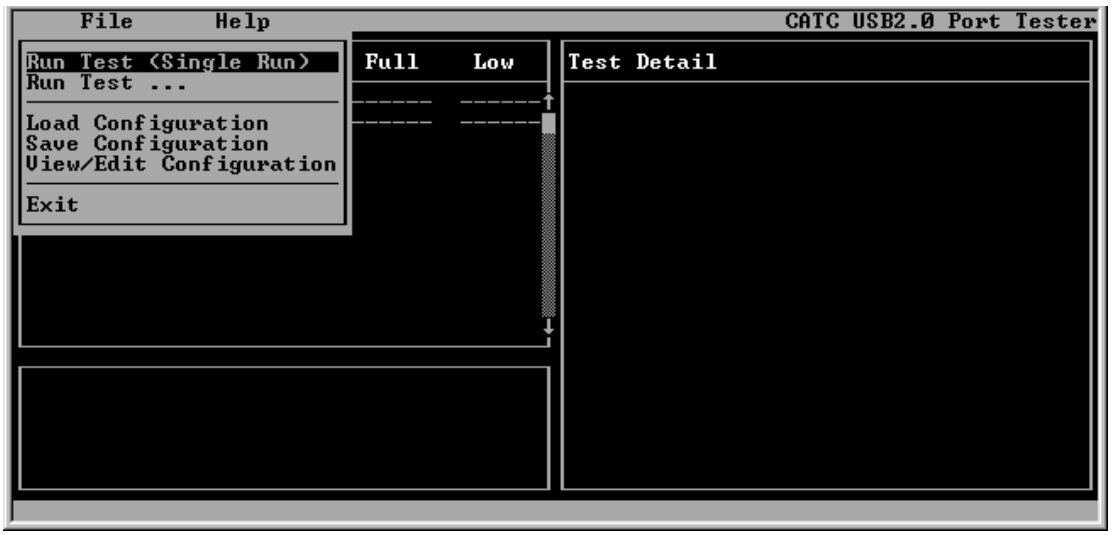

Figure #1: The File menu showing the option View/Edit Configuration.

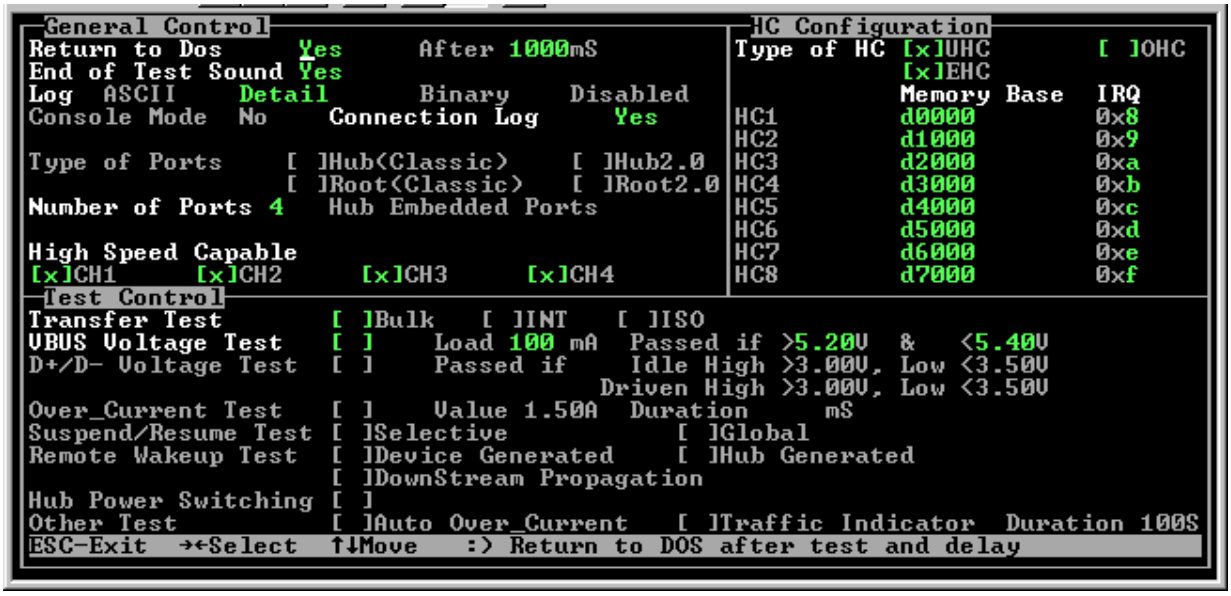
General Control
Return to Dos Yes After 1000mS
End of Test Sound Yes
Log ASCII Detail Binary Disabled
Console Mode No Connection Log Yes
Type of Ports [ ]Hub(Classic) [ ]Hub2.0
[ ]Root(Classic) [ ]Root2.0
Number of Ports 4 Hub Embedded Ports
High Speed Capable
[x]CH1 [x]CH2 [x]CH3 [x]CH4
HC Configuration
Type of HC [x]UHC [ ]OHC
[x]EHC
Memory Base IRQ
HC1 d0000 0x8
HC2 d1000 0x9
HC3 d2000 0xa
HC4 d3000 0xb
HC5 d4000 0xc
HC6 d5000 0xd
HC7 d6000 0xe
HC8 d7000 0xf
Test Control
Transfer Test [ ]Bulk [ ]INT [ ]ISO
VBUS Voltage Test [ ] Load 100 mA Passed if >5.20V & <5.40V
D+/D- Voltage Test [ ] Passed if Idle High >3.00V, Low <3.50V
Driven High >3.00V, Low <3.50V
Over_Current Test [ ] Value 1.50A Duration mS
Suspend/Resume Test [ ]Selective [ ]Global
Remote Wakeup Test [ ]Device Generated [ ]Hub Generated
[ ]DownStream Propagation
Hub Power Switching [ ]
Other Test [ ]Auto Over_Current [ ]Traffic Indicator Duration 100S
ESC-Exit →←Select ↑↓Move :) Return to DOS after test and delay

Figure #2: The Configuration Screen

The Configuration screen is shown in Figure 2. This screen allows you to enable or disable a test. Use the Up/Down arrow keys to move the cursor to the desired fields under "Test Control," push the <spacebar> to check or uncheck a test case. When a test case is checked, it is enabled. In the example shown in Figure 2, no test has been enabled.

1.5 *Question #4: How do I save a Test Configuration?*

To save the settings you configured in the Configuration screen, select **File** > **Save Configuration** from the menu. A text-based configuration file called UPT2.CFG is created that saves the specified configuration. If desired, this file can be edited with a text editor such as Notepad. For example, to disable the HUB generated remote wakeup test using Notepad:

Step 1: Open UPT2.CFG with Notepad.

Step 2: Locate the line that reads **HubGeneratedRW=Yes**.

Step 3: Change "Yes" to "No."

Step 4: Save the file.

How to Contact CATC

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